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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,700	11/19/2003	Takahiro Nakamura	10921.188US01	8869
23552	7590	05/10/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			NGUYEN, HA T	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,700

Applicant(s)

NAKAMURA, TAKAHIRO

Examiner

Ha T. Nguyen

Art Unit

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11-19-03

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC, § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(a) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. (USPN 5938797, hereinafter "Fujiwara") in view of Sano et al. (JPN 7-282802, hereinafter "Sano").

Referring to Figs. 2a, 3, and related text, Fujiwara discloses a method of making a capacitor element used for a solid electrolyte capacitor, the method comprising the steps of forming, on an anode chip 1 of valve metal, a dielectric layer 4, a first solid electrolyte layer of manganese dioxide 5, a graphite layer 7a and a metal layer 8a in this order, wherein the method further comprises the step of forming an intermediate solid electrolyte layer 6 between the step of forming the first solid electrolyte layer and the step of forming the graphite layer, the intermediate solid electrolyte layer being formed by applying and sintering of a manganese nitrate aqueous solution graphite powder (See col. 4, lines 10-33).

But it fails to disclose expressly the manganese nitrate aqueous solution containing 0.5-2.0wt% of graphite powder.

However, the missing limitation is well known in the art because Sano discloses this feature (See Constitution).

A person of ordinary skill is motivated to modify Fujiwara with Sano to obtain excellent moldability and prevention of peeling off.

Therefore, it would have been obvious to combine Fujiwara with Sano to obtain the invention as specified in claim 1.

3. Claim 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara in view of Hanawa et al. (USPN 5938798, hereinafter "Hanawa").

Referring to Figs. 2a, 3, and related text, discloses a method of making a capacitor element used for a solid electrolyte capacitor, the method comprising the steps of forming, on an anode chip of valve metal 1, a dielectric layer 4, a solid electrolyte layer manganese dioxide 5, a first graphite layer 7a and a metal layer 8a in this order, wherein the method further comprises the step of forming an intermediate graphite layer 6 between the step of forming the solid electrolyte layer and the step of forming the first graphite layer.

But it fails to disclose expressly the intermediate graphite layer being formed of a graphite material containing manganese dioxide powder and wherein the step of forming the intermediate graphite layer includes applying of a graphite solution that contains 5-10wt% of manganese dioxide powder and drying of the applied solution.

However, the missing limitations are well known in the art because Hanawa discloses solid electrolyte of graphite material containing manganese dioxide (See col.7 , lines 29-59). Besides, in the combined teaching of Fujiwara and Hanawa it would have been obvious to have an intermediate layer with gradually increasing graphite concentration between manganese dioxide and graphite layer, including portion with 5-10wt% of manganese dioxide powder, to have better adhesion.

A person of ordinary skill is motivated to modify Fujiwara with Hanawa to obtain capacitor with improved characteristics .

Therefore, it would have been obvious to combine Fujiwara with Hanawa to obtain the invention as specified in claims 2-3.

Art Unit: 2812

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha T. Nguyen whose telephone number is (571) 272-1678. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM, except the first Friday of each bi-week. The telephone number for Wednesday is (703) 560-0528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael S. Lebentritt, can be reached on (571) 272-1873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ha Nguyen
Primary Examiner
4- 29 - 05